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Energy Savings: Home Lighting and Appliances

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The average U.S. household spends \$1,400 each year on energy bills. You can, however, lower your energy bill and become energy-smart by changing practices, modifying operations, improving maintenance, and making good purchases.

Wise practices

Get the most from the energy you use. Cut energy waste without sacrificing your need for major appliances:

- If possible, locate your refrigerator away from the stove, dishwasher, or heat vents for greater efficiency. For most efficient use, don't overload or keep your refrigerator too empty.
- Change the setting on your electric refrigerator to energy-save mode. Raise the temperature from about 35° F to 40° F (1.7° C to 4.5° C).
- Turn your water heater to 120° F (most are calibrated to operate at 140° F).
- Use the microwave and toaster oven for more cooking (not just reheating) and use the large electric or gas oven only when you are cooking large amounts of food.
- On the top of the stove, use flat-bottomed pans that completely cover the burner for more efficient use of the heat. Also use a lid to decrease heating time.
- Replace incandescent bulbs in the lights you use most often with compact fluorescent bulbs; they use less than a fourth of the energy of conventional bulbs.
- Turn lights off in unused rooms.
- Turn off television and stereo when not in use.

- Activate the energy conservation settings on your computer or switch off the monitor when not in use.

Operation of appliances

- Scrape but don't pre-rinse dishes by hand if you have a dishwasher that automatically pre-rinses or has a rinse/hold cycle. Use the energy saver found on many machines.
- Use the water level and temperature settings on your clothes washer to match the size of your load. Don't fill the whole tub for only a few small items.
- Clean the clothes dryer filter after each use.

Maintenance of appliances

- Check air leaks around the refrigerator and freezer door gaskets; replace gasket if necessary.
- Defrost the freezer when there is no more than a quarter-inch of ice on the walls.

Smart appliance purchases

Look for the ENERGY STAR® label. It's the law that all new major home appliances must meet energy conservation standards set by the U.S. Department of Energy. Many appliances beat the standard, use even less energy, and cost less to run.

ENERGY STAR® labels appear on appliances that are the most energy efficient products in their class. These labels allow you to compare the efficiency or annual energy use of competing brands and similar models.

The more energy an appliance uses, the more it will cost to run. The initial cost of an energy-saving appliance may seem too high, but consider the possible savings over the 10-to-20-year life of the appliance. An energy-efficient appliance can make a significant difference on your monthly utility bill.

Select the size and style that best fits your needs. Measure the space the appliance will occupy to be sure your new purchase will fit. Then purchase only those features you will use.

Compare the performance of different brands and models and estimate how much the appliance will cost to operate. Ask to see the manufacturer's product literature. Ask about repair histories, how much water or electricity the appliance uses and its energy efficiency. Consider operation cost in the purchase of the appliance.

Ask about special energy efficiency offers. Ask your salesperson or local utility about cash rebates, low-interest loans, or other incentive programs in your area for energy-efficient product purchases—and how you can qualify.

Summary

Consider your specific needs and operations to save energy. Perhaps you need to change the number or type of appliances you use and your purchasing patterns, operating procedures, and appliance maintenance.

Energy consumption varies widely from family to family, due to variations in appliance efficiency, their use, and other factors. You can make a dent in your home energy bills by following these suggestions.

References

- American Council for an Energy Efficient Economy. Consumer Guide to Home Energy Savings. Retrieved September 18, 2006, at <http://www.aceee.org/consumerguide/index.htm>
- National Institute of Standards and Technology. How to buy an energy-efficiency appliance. Retrieved September 18, 2006, at <http://www.ftc.gov/bcp/conline/pubs/homes/applnces.htm>
- U.S. Department of Energy, Energy Information Administration. Retrieved September 18, 2006 at http://www.eia.doe.gov/glossary/glossary_1.htm
- U.S. Environmental Protection Agency and U.S. Department of Energy. Home energy analysis: high energy bills. Retrieved September 18, 2006, at <http://www.energystar.gov/index.cfm?c=home.index>